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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/510,372	04/14/2005	Florian Straub	004501-789	8782

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ALEXANDRIA, VA 22313-1404

EXAMINER
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OKEKE, IZUNNA

ART UNIT	PAPER NUMBER
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2432

NOTIFICATION DATE	DELIVERY MODE
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11/10/2008

ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

ADIPFDD@bipc.com

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/510,372	STRAUB ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	IZUNNA OKEKE	2432	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 10/05/2004.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-25 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-25 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 10/05/2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>10/05/2004</u> .  | 6) <input type="checkbox"/> Other: _____                          |



## **DETAILED ACTION**

### ***Response to Arguments***

1. Applicant's arguments with respect to claim 1-25 have been considered but are moot in view of the new ground(s) of rejection.

### ***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-12 and 14-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hanna et al. (WO 01/72012), and further in view of Diffie et al. (US 5371794).

a. *Referring to amended claim 1:*

Regarding amended claim 1, Hanna teaches a method for remotely controlling and/or regulating at least one system, in particular an industrial system (See Hanna, Abstract teaches a method for remotely controlling an industrial appliance), using a communication device which is assigned to the system, wherein a communication is dispatched by the communication device, the communication comprises information relating to the system and a validation code, wherein the information and the validation code are combined in accordance with a first combination rule (See Hanna, Page 7, Line 18-24 teaches a communication dispatched by the device which is a combination of the information and the authentication value),

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and from a message which the communication device receives after the communication has been dispatched a check code is extracted according to a first extraction rule and by means of the validation code and the check code it is checked whether the message originates from a receiver of the communication (See Hanna, Para 7, Line 12-17 teaches a message received from the controller wherein the authentication code from the controller is verified) , and only if the checking is successful, an instruction information according to the first extraction rule is extracted from the message and is implemented by the system (See Hanna, Page 7, Line 24-25 and Page 8, Line 1-5 teaches implementing the code after the verification)

Hanna does not teach a period of validity information which is appended to the communication.

However, Diffie teaches a validity period information which is added to a credential used in checking the authenticity of a device whereby the credential is only valid within the amount of time specified in the validity period information (See Diffie, Col 7, Line 6-8 teaches a secure authentication between two device whereby a communication is sent to one device containing an authentication value and a validity period appended to the communication).

Therefore, it would have been to one of ordinary skill at the time the invention was made to modify Hanna's authentication information to include a validity information as taught by Diffie for the purpose of specifying the period of time which the authentication value is valid for use, hence securing the communication between the systems by making the authentication value credential invalid after a period of time.

a. Referring to claim 2:

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Regarding claim 2, the combination of Hanna and Diffie teaches the method as claimed in claim 1, wherein the validity information is appended to or is prefixed to the validation code (See Diffie, Col 7, Line 6-8 teaches a secure authentication between two device whereby a communication is sent to one device containing an authentication value and a validity period appended to the communication).

a. Referring to claim 3:

Regarding claim 3, the combination of Hanna and Diffie teaches the method as claimed in claim 1, wherein the validation code is valid once (See Hanna, Page 10, Line 22-25 teaches the authentication value being valid only once).

a. Referring to claim 4:

Regarding claim 4, the combination of Hanna and Diffie teaches the method as claimed in claim 1, wherein the validation code is generated by a random number generator (See Diffie, Col 7, Line 43-45 teaches a randomly generated CH1 number which is used proving the authenticity of a device).

a. Referring to amended claim 5:

Regarding amended claim 5, the combination of Hanna and Diffie teaches the method as claimed in claim 1, wherein the validity information is directly added to the validation code, the validation code is transmitted in encrypted form (See Hanna, Page 10, Line 13-16 teaches encrypting the authentication value and the rejection in claim 1 teaches a validity period information), and after decryption of the message or check code in the communications device, the validity information is available again in plain text and the validity information is not stored

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in the communication device (See Hanna, Page 10, Line 13-16 teaches decrypting the authentication value and making it available in plain form).

a. Referring to claim 6:

Regarding claim 6, the combination of Hanna and Diffie teaches the method as claimed in claim 1, wherein the validation code itself is encrypted before it is added in accordance with a first combination rule to the communication or message. (See Hanna, Page 10, Line 13-16)

a. Referring to claim 7:

Regarding claim 7, the combination of Hanna and Diffie teaches the method as claimed in claim 1, wherein the check code is transmitted in encrypted form (See Hanna, Page 10, Line 13-21).

a. Referring to amended claim 8:

Regarding amended claim 8, the combination of Hanna and Diffie teaches the method as claimed in claim 1, wherein the receiver of the communication adds, in accordance with a third combination rule, a dispatcher information to the message which he generates (See Hanna, Page 10, Line 16-20 teaches a communication from the controller to the device comprising a dispatcher information such as a model number together with the information), the dispatcher information is extracted from the message in accordance with a third extraction rule, the dispatcher is identified by means of the dispatcher information and stored dispatcher data, only if the checking, as to whether the message originates from a receiver of the communication, is successful and if the identification of the dispatcher is successful, an instruction information is implemented by the system, after the check code and dispatcher information have been extracted from the message, and if the checking and/or the identification

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of the dispatcher were/was not successful, the instruction information is ignored (See Hanna, Page 14, Line 9-22 teaches extracting the values in the message received from the controller, verifying the authenticity of the sender and utilizing the message contained in the communication if the sender is verified to be accurate).

a. Referring to claim 9:

Regarding claim 9, the combination of Hanna and Diffie teaches the method as claimed in claim 8, wherein - the dispatcher information contains a secret password or a secret identification number (See Hanna, Page 10, Line 16-20).

a. Referring to claim 10:

Regarding claim 10, the combination of Hanna and Diffie teaches the method as claimed in claim 8, wherein the dispatcher information is transmitted in encrypted form (See Hanna, Page 10, Line 16-21 teaches encrypting the information).

a. Referring to claim 11:

Regarding claim 11, the combination of Hanna and Diffie teaches the method as claimed in claim 8, wherein the dispatcher information itself is encrypted before it is added to the message in accordance with a third combination rule (See Hanna, Page 10, Line 16-21).

a. Referring to claim 12:

Regarding claim 12, the combination of Hanna and Diffie teaches the method as claimed in claim 1, wherein the entire communication and/or message are encrypted (See Hanna, Page 10, Line 16-20).

a. Referring to claim 14:



Regarding claim 14, the combination of Hanna and Diffie teaches the method as claimed in claim 1, wherein the message is received via Internet (See Hanna, Page 10, Line 5-11 teaches communication received over the internet).

a. Referring to newly added claim 15:

Regarding newly added claim 15, the combination of Hanna and Diffie teaches The method as claimed in claim 1, wherein when the communication is dispatched, a copy of the validation code is stored so that it is available for the comparison when a message is received later, and the validity information is stored together with the validation code (See Hanna, Page 12, Line 14-17 teaches storing the authentication value received from the communication).

a. Referring to newly added claim 16:

Regarding claim 16, the combination of Hanna and Diffie teaches a method for remotely controlling and/or regulating at least one system, in particular an industrial system, using a communication device which is assigned to the system, wherein a communication is dispatched by the communication device (See Hanna, Page 13, Line 14-17 teaches control module 33),

- the communication comprises information relating to the system and a validation code, wherein the information and the validation code are combined in accordance with a first combination rule (See Hanna, Page 7, line 19-25 teaches the information and the authentication value), and
- from a message which the communication device receives after the communication has been dispatched, a check code is extracted according to a first extraction rule and by means of the validation code and the check code it is checked whether the message originates from a receiver of the communication, and only if the checking is successful, an instruction

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information according to the first extraction rule is extracted from the message and is implemented by the system (See the rejection in claim 1),

- wherein the validation code has a limited period of validity, wherein a validity information is added to the validation code, which validity information defines the limited period of validity of the validity code (See the rejection in claim 1), and wherein

- when the communication is dispatched, a copy of the validation code is stored so that it is available for the comparison when a message is received later, and the validity information is stored together with the validation code (See the rejection in claim 15).

a. Referring to newly added claim 17:

Regarding claim 17, the combination of Hanna and Diffie teaches the method as claimed in claim 16, wherein the validity information is appended to or is prefixed to the validation code (See the rejection in claim 2).

a. Referring to newly added claim 18:

Regarding claim 18, the combination of Hanna and Diffie teaches the method as claimed in claim 16, wherein the validation code is valid once (See the rejection in claim 3).

a. Referring to newly added claim 19:

Regarding claim 19, Hanna teaches the validation code of claim 16.

Hanna does not teach that the validation code is generated by a random number generator.

However, Diffie teaches a secure authentication system wherein a validation code is generated by a random number generator (See Diffie, Col 7, Line 43-45 teaches a randomly generated CH1 number which is used proving the authenticity of a device)

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Therefore, it would have been obvious to one of ordinary skill at the time the invention was made to modify Hanna's authentication value to a randomly generated value that is valid once as taught by Diffie for the purpose of securing the communication and making the authentication value invalid in the event a third party should steal the authentication value.

a. Referring to newly added claim 20:

Regarding claim 20, the combination of Hanna and Diffie teaches the method as claimed in claim 16, wherein - the receiver of the communication adds, in accordance with a third combination rule, a dispatcher information to the message which he generates (See the rejection in claim 8),

- the dispatcher information is extracted from the message in accordance with a third extraction rule, the dispatcher is identified by means of the dispatcher information and stored dispatcher data (See the rejection in claim 8),

- only if the checking, as to whether the message originates from a receiver of the communication, is successful and if the identification of the dispatcher is successful, an instruction information is implemented by the system, after the check code and dispatcher information have been extracted from the message, and if the checking and/or the identification of the dispatcher were/was not successful, the instruction information is ignored (See the rejection in claim 8).

a. Referring to newly added claim 21:

Regarding claim 21, the combination of Hanna and Diffie teaches a method for remotely controlling and/or regulating at least one system, in particular an industrial system, using a communication device which is assigned to the system, wherein a communication is

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dispatched by the communication device, the communication comprises information relating to the system and a validation code, wherein the information and the validation code are combined in accordance with a first combination rule (See the rejection in claim 1), and from a message which the communication device receives after the communication has been dispatched, a check code is extracted according to a first extraction rule and by means of the validation code and the check code it is checked whether the message originates from a receiver of the communication, and only if the checking is successful, an instruction information according to the first extraction rule is extracted from the message and is implemented by the system (See the rejection in claim 1), wherein the validation code has a limited period of validity, wherein a validity information is added to the validation code, which validity information defines the limited period of validity of the validity code, the validity information is directly added to the validation code (See the rejection in claim 1), the validation code is transmitted in encrypted form, and after decryption of the message or check code in the communications device, the validity information is available again in plain text and the validity information is not stored in the communication device (See the rejection in claims 1 and 15).

a. Referring to newly added claim 22:

Regarding claim 22, the combination of Hanna and Diffie teaches the method as claimed in claim 21, wherein the validity information is appended to or is prefixed to the validation code (See the rejection in claim 2).

a. Referring to newly added claim 23:

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Regarding claim 23, the combination of Hanna and Diffie teaches the method as claimed in claim 21, wherein the validation code is valid once (See the rejection in claim 3).

a. Referring to newly added claim 24:

Regarding claim 24, the combination of Hanna and Diffie teaches the method as claimed in claim 21, wherein the validation code is generated by a random number generator (See the rejection in claim 4).

a. Referring to newly added claim 25:

Regarding claim 25, the combination of Hanna and Diffie teaches the method as claimed in claim 21, wherein

- the receiver of the communication adds, in accordance with a third combination rule, a dispatcher information to the message which he generates, the dispatcher information is extracted from the message in accordance with a third extraction rule, the dispatcher is identified by means of the dispatcher information and stored dispatcher data (See the rejection in claim 8), only if the checking, as to whether the message originates from a receiver of the communication, is successful and if the identification of the dispatcher is successful, an instruction information is implemented by the system, after the check code and dispatcher information have been extracted from the message, and if the checking and/or the identification of the dispatcher were/was not successful, the instruction information is ignored (See the rejection in claim 8).

4. Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hanna et al. (WO 01/72012) and Diffie et al. (US 5371794), and further in view of Silen et al. (US-2002/0045442).

a. Referring to claim 13:

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Regarding claim 13, the combination of Hanna and Diffie teaches the method as claimed in claim 1 wherein the communication is dispatched or received from one system to another (See Hanna, Page 6 and 7).

Hanna and Diffie does not teach communication and/or the message are dispatched and/or received by means of short message service.

However, Silen teaches a communication and/or the message are dispatched and/or received by means of short message service (See Silen, Abstract)

Therefore, it would have been obvious to one of ordinary skill at the time the invention was made to modify Hanna and Diffie's means of dispatching and receiving control communications as a short message service as taught by Silen for the purpose of expanding the devices used in controlling the system such as the use of a mobile device from any location to control the system.

### ***Conclusion***

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

a. Yoon et al. (US-6956461) teaches an apparatus and method for remotely controlling household appliances connected to a home network (See Abstract).

6. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO**

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MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to IZUNNA OKEKE whose telephone number is (571)270-3854. The examiner can normally be reached on 9:00am - 5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gilberto Barron can be reached on (571) 272-3799. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system.

/I. O./  
Examiner, Art Unit 2432

/Gilberto Barron Jr/  
Supervisory Patent Examiner, Art Unit 2432